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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO 09/281,089 03/30/99 KUHN H 1996A **EXAMINER** 025280 IM22/1002 MILLIKEN & COMPANY GUARRIELLO. J **ART UNIT** PAPER NUMBER 920 MILLIKEN RD PO BOX 1926 10 SPARTANBURG SC 29304 1771 DATE MAILED: 10/02/01

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## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 10

Application Number: 09/281089

Filing Date: 3/30/1999

Appellant(s): Hans H. Kuhn et al.

William S. Parks
For Appellant

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### **EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed 7/24/2001.

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#### (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

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#### (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: Claims are rejected under 35 U.S.C. 112, second paragraph, and 35 U.S.C. 103 rejection over obviousness, Oishi et al. 4,911,957 in view of Watanabe et al. 4,435,220. Claims are not rejected under 35 U.S.C. 112, first paragraph.

#### (7) Grouping of Claims

The appellant's statement in the brief that certain claims do not stand or fall together is not agreed with because the claims, 1-6, are not argued separately. Thus, the claims 1-6 stand or fall together.

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#### (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,911,957 OISHI ET AL. 3-1990 4,435,220 WATANABE ET AL. 3-1984

#### (10) Grounds of Rejection

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, and 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1, it is not clear what the terms "coprecipitate" and "copolymer" encompass, since Iron oxide hydroxide and Aluminum oxide hydroxide are inorganic ionic species **not** polymeric species.

In claim 2, it is not clear what the phrase "substantially goethite" encompasses, since there is only a small part which is actually "goethite", which appears to be less than 50%, as noted in the instant specification on page 13, line 1. The specification cites lepidocrocite, hematite, magnetite, or a combination of these forms.

In claim 6, it is not clear what aspects of the preamble "water filtration article" encompass, since a dependent claim is to further limit the independent claim. This claim depends on claims 1 and 2 and it is not clear how this further limits, because this appears to be intended use without any specificity of structure.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. 4,911,957 in view of Watanabe et al. 4,435,220.

Oishi describes composite ferrite textiles and how a **film** can be deposited on a fibrous substrate (like a textile) within certain ranges of pH, and concentration of ions (column 1, lines 15-20; column 2, lines 1-14, lines 58-68). Oishi describes how other ions can be added, like Aluminum in a water soluble salt forming a mixed species, (column 3, lines 1-10). Oishi differs from the claimed invention because the specific Aluminum salts are not stated.

Watanabe describes transparent colored pigments of metal oxide or metal hydroxide (column 2, lines 3-22). Watanabe describes coatings with colored metal oxides or metal hydroxides, (column 1, lines 1-12) which

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metal oxides or metal hydroxides are used for changing the color of pigments, (column 3, lines 10-39). Watanabe describes Aluminum salts, (column 2, lines 6-40; column 3, lines 17-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the ferrite textile of Oishi with the Aluminum hydroxide salts of Watanabe motivated with the expectation that the coating (like a film) produced on the textile would give enhanced properties of color reflectivity. It would be within the skill of the person of ordinary skill in the art to optimize the amounts of components as Watanabe indicates, so as to achieve color shade by mixing proportions of the metal oxides, (column 3, lines 35-39).

#### (11) Response to Argument

Applicant's arguments have been considered regarding the 112 rejections of "copolymer/coprecipitate" but they are not persuasive because, although applicant may be his or her own lexicographer, a term in a claim

may not be given a meaning repugnant to the usual meaning of the term. See In re Hill, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "coprecipitate/copolymer" in claim 1 is used by the claim to mean "copolymer", while the accepted meaning is "two monomers". The term "coprecipitate" is not equivalent to "copolymer". Furthermore, while the Examiner concedes the existence of inorganic polymers, as noted by applicant's reference to Hackh's Chemical Dictionary, applicant's claimed invention is directed to a three dimensional inorganic crystal lattice not to a copolymer, as asserted, because there are no chains of monomer present in the claimed invention. Moreover, no covalent bonding is noted in the claimed invention regarding the use of the term "copolymer", especially directed to metals. The claimed invention appears to be amorphous alloys.

Applicant's arguments regarding the rejection under 35 U.S.C. 103 as being improper have been considered, but it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based

upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper, se In re McLaughlin, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971). In the instant case, Oishi describes a ferrite film (Iron oxide) deposited on the surface or particles or the fibers, (column 1, lines 65-68). Watanabe describes how metal salts and hydroxide can be used in combination with one another, and the proportions can be freely chosen so as to produce the precipitated oxide or hydroxide in film-like form on a generic substrate, (column 2, lines 48-68). The claimed invention taken as a whole without any criticality specified would still be obvious to one of ordinary skill in the art based on the applied teachings.

Applicant's arguments regarding specific reaction conditions have been noted but the claimed invention is directed to an article, specifically a

textile and not a process. Per MPEP 2113, Appellant has not shown how the process steps claim results in a materially different product. Applicant's arguments regarding the motivation to use the pigment of Watanabe is non-analogous is noted. The determination that a reference is from a nonanalagous art is twofold, In re Wood and Eversole, 202 USPQ 171 (CCPA 1979). First, decide if the reference is within the field of the inventor's endeavor. If it is not, proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. Since metal oxide and hydroxides are described, and applicant's claimed invention encompasses metal oxides and hydroxides the second test being reasonably pertinent is met. Thus, the pigment may be modified as noted in Oishi, (column 4, lines 50-53). Thus, there is motivation to modify the pigment.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

de

John J. Guarriello:gj Patent Examiner

September 27, 2001

Appeal Conferee - For

Appeal Conferee - BC

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